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Influence of Technology Acceptance of Office Technology Information Systems in The Banyumas Regency Regional Government

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ABSTRACT

The performance of government agencies is influenced by the use of information technology. Organizations have responded positively to the development of information technology by designing information systems based on computer technology or websites. Information technology supports information systems in providing added value to organizations if they are designed to be effective information systems. Currently, information technology has been widely used, the application of which has been adjusted to suit needs. The problem in this research is to determine the acceptance of information systems in government in Banyumas district. The results of the Technology Acceptance Model (TAM) statistical test are that the system quality variable has a positive influence on convenience with a critical ratio of 6.175. The resulting critical ratio value is 7.033. The critical ratio significance level is above 1.96 for 5% significance, with a critical ratio of 7.026. The results of the path coefficient (standardized regression weight estimate) with a critical ratio of 6.053. The convenience variable has a positive influence on the behavioral variable with a critical ratio of 5.373. The behavioral variable is positively related to the intention variable with a critical ratio of 5.882. The usefulness variable is positively related to the intention variable with a critical ratio of 4.83. The usefulness variable is positively related to the intention variable with a critical ratio of 4.831. The intention variable is positively related to the use variable with a critical ratio of 6.017.

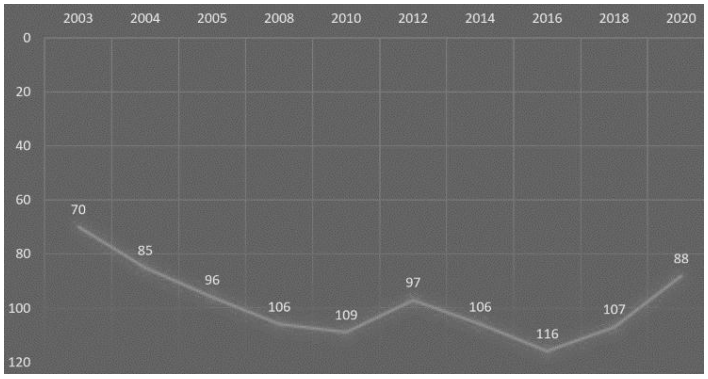
Key word : Technology Acceptance Model

1. Introduction

Current developments have experienced changes in various fields, one of which is technology. Technological developments are increasingly sophisticated as a form of fulfilling human needs for access to information quickly, precisely, up to date and accurately. Humans as users of technology should be able to properly understand the technology according to its development. Technological advances have a very significant impact in all fields, especially government. This development emerged as a result of bureaucratic reform.

Bureaucratic reform is a form of change in an organization towards improvement. In bureaucratic reform, one important aspect is the arrangement of central and regional management, whether in the province, district or city. This is considered important because management capabilities in a government bureaucracy will influence the success of implementing a policy effectively and efficiently. Within the government agency environment, all government agency activities will be measured based on accountability for individual performance, work units, agencies, and even the government as a whole.

The performance of government agencies is influenced by the use of information technology. Organizations have responded positively to the development of information technology by designing information systems based on computer technology or websites. Information technology supports information systems in providing added value to organizations if they are designed to be effective information systems. Information technology is the main choice in an organization to create an information system that is strong and capable of generating competitive advantages amidst today's intense competition (Darmini and Putra, 2007:64-67). Currently, information technology has been widely used, the application of which has been adjusted to suit needs. The application of information technology aims to improve the performance of employees and government officials. This is in accordance with the results of a UN survey regarding Indonesia's e-government ranking in the world in 2020.



Gambar 1. Peringkat E-Government Indonesia Di Dunia Tahun 2020

The results of the United Nations (UN) E-Government Survey 2020 show that Indonesia is in the top 100 world rankings by occupying 88th position out of 193 countries for the development and implementation of e-government or electronic-based government systems (SPBE) with a score of 0.6612, an increase of 19 levels from 2018. at rank 107. The scores for each component of the Indonesian E-Government Development Index are for the Online Services Index with a score of 0.6824, the Telecommunications Infrastructure Index with a score of 0.5669 and the Human Resources Index with a score of 0.7342.

Information technology is inseparable from modern office management. The use of information technology in modern office management makes it easier and speeds up the completion of office work in data processing starting from processing, obtaining, compiling, storing and manipulating data in various ways. The results of the use of technology are quality information that is relevant, accurate and timely, which is used for personal, business and government purposes, especially decision making.

The use of information technology in the government environment is commonly known as e-government. E-government refers to the use of intranets and the internet to bridge various needs of society, business circles, and intergovernmental activities. Through e-government, the government can easily carry out various public business transactions through automation systems and internet networks (e-procurement) or other forms of transactions better known as www (world wide web). The use of information technology in e-government can improve relations between the government and various other parties in forming new relationships such as Government to Citizen, Government to Business, and Government to Government.

E-government has many benefits in forming new relationships with society, business circles and between governments. E-government makes it easy to access various information provided by the government 24 hours a day without having to come directly to a government office. The ease with which information can be obtained shows that the government is transparent and open in presenting information. E-government also helps the government in conducting questions and answers, coordinating or discussing with other governments.

The need for information requires the government to provide information that is easily accessible, including within the government apparatus. One solution that can be implemented is the integration of the government administration system. The government administration system is formed through an online information system network that is connected between government agencies both at the central and regional levels, making it easier for the public to access all data and information, especially those related to public services. Advances in information technology act as a trigger for the government to make strategic changes, encouraging government officials to anticipate new paradigms through efforts to increase bureaucratic performance and improve services towards the realization of good governance. Therefore, realizing modern office management based on modern office information technology is a need that must be met by the government.

Fulfilling information technology needs will obtain maximum results if users can utilize the information technology system well. To find out the use of information systems, analysis is needed as an evaluation of the information system. Usage analysis is needed so that potential users of information systems become more confident that information systems are able to meet their needs in improving their performance and to determine user attitudes towards information systems. Analysis of the use of information systems can be measured using one of the theoretical approaches that provides an overview of the level of acceptance of technology, namely the Technology Acceptance Model (TAM).

The Technology Acceptance Model (TAM), which was first put forward by Davis (1989), is a theoretical approach that describes users' reactions and perceptions of technology which can influence their attitudes towards accepting technology. Users will react to accept or reject technology for several reasons. First, people tend to use or not use information technology, because users believe that this information technology is able to help (or make it difficult) in carrying out tasks. Second, even though potential users believe that the system is useful, at the same time they also believe that the system is too difficult to use. TAM consists of five main constructs, including: perceived ease of use, perceived usefulness, attitude towards using, behavioral intention to use, and actual system use. usage) (Davis et al., 1989). Several studies examining information systems have found that perceived usefulness, perceived ease of use, attitude towards using, behavioral intention to use, and actual system usage influence each other.

However, in practice, the constructs in TAM often provide different results from theory. Therefore, further study is needed regarding the acceptance of office technology information systems in the Banyumas Regency Regional Government.

The Technology Acceptance Model (TAM) is a model that is generally used to explain user acceptance of the use of information technology systems [4]. TAM is a theoretical development of the Theory of Reasoned Action (TRA) by Ajzen and Fishbein [5]. This model was first introduced by Davis [6].

The TAM developed by Davis has added two main constructs to the TRA model. Perceived ease of use and perceived usefulness are the two main constructs that were added. TAM explains that these two main constructs determine user acceptance of information technology systems. The constructs from TAM that have not been modified consist of five main constructs, including: perceived ease of use, perceived usefulness, attitude towards use, behavioral intention to use, and actual system usage.

Intensi (Intention)

Intention is an individual's intention or desire to carry out a certain behavior (Dayakisni & Hudaniah, 2015). Apart from that, according to Ajzen (2005), intentions can be explained through the theory of planned behavior which is a development of the theory of reasoned action. Intention reflects an individual's willingness to try to carry out a certain behavior (Ajzen, 2005).

In another reference, Ajzen in Teo & Lee (2010), put forward the definition of intention, namely an indication of how strongly someone believes they will try a behavior, and how much effort will be used to carry out a behavior. Intention has a high correlation with behavior, therefore it can be used to predict behavior (Ajzen, 2005).

Perceived Ease of Use (PEU)

Social media networks provide a variety of opportunities including enabling communication, collaboration, information sharing and enjoyment which have all been suggested as important factors influencing Instagram adoption. Perceived Ease of Use has been defined as “the degree to which a person believes that using a particular system will be free of effort” (Venktatesh and Davis, 2000).

The increasing diversity of people signing up with social media means that it should be relatively easy to create an account and start using and enjoying the service. Rauniar et al., (2014) define Perceived Ease of Use as the degree to which a social media site is effortless.

Perceived Usefulness (PU)

An important factor influencing the adoption of a social media network is a combination of a particular user's technical skills and his or her competency in Instagram's specific features. Perceived Usefulness is defined as "the extent to which a person believes that using a particular system will improve his or her job performance" (Venktatesh and Davis, 2000).

In research, Rauniar et al., (2014) defined Perceived Usefulness as the extent to which social media users believe that using certain social media sites helps fulfill individual goal-driven needs. Each social media application offers certain key services, and therefore offers different types of tools and applications to add utilitarian value to its audience.

Trust

The extent to which users believe in implicit contracts with social media sites and other users is critical in understanding user activities and behavior including voluntary exchange of information. Therefore, Rauniar et al., (2014) believe that the issue of trust in social media sites is an important construct for the TAM model for social media.

According to Mayer et al. Quoted by Tripathi (2014), trust reflects an individual's confidence that personal information sent to SNS (Social Networking Sites) will be handled competently, kindly and with integrity by the SNS. According to Alagoz and Hekimoglu (2012), trust forms the basis of consumer beliefs about the security of online media. 116. So social media sites can use varying levels of security features to reduce user privacy concerns, and build trust (Culnan and Armstrong, 1999).

TAM is very suitable to be used to explain the various uses of information technology in entrepreneurial practice. As the results of research conducted by Chau (1996); Davis (1989); Igbaria et al (1997); Sun (2003) in Jogiyanto (2007: 114) states that the usefulness of preparation (perceived usefulness) is the most numerous and significant and important construct that influences attitudes, intentions and behavior in using technology compared to other constructs. others. According to Jogiyanto, the Technology Acceptance Model (TAM) is a model of acceptance of information technology systems that will be used by users (2007:111). The technology acceptance model or Technology Acceptance Model was developed by Davis et.al in 1989. The concept of the Technology Acceptance Model (TAM) is depicted in figure 2.4.

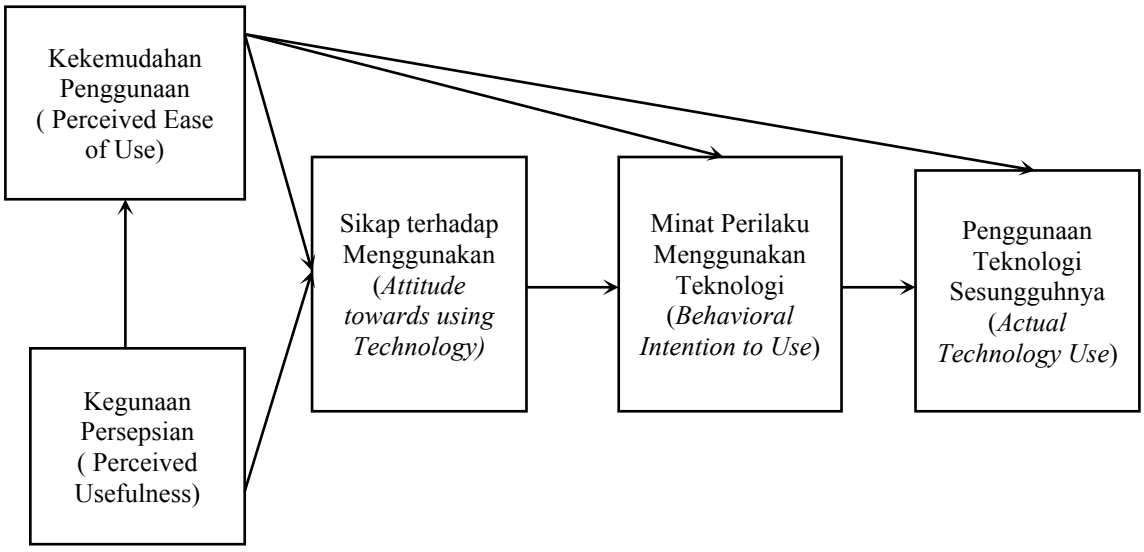


Figure 2.4 Technology Acceptance Model (TAM)

Developments in the field of technology have resulted in further research developing the Technology Acceptance Model (TAM) by adding external variables used. The Technology Acceptance Model (TAM) is developed in Figure 2.5.

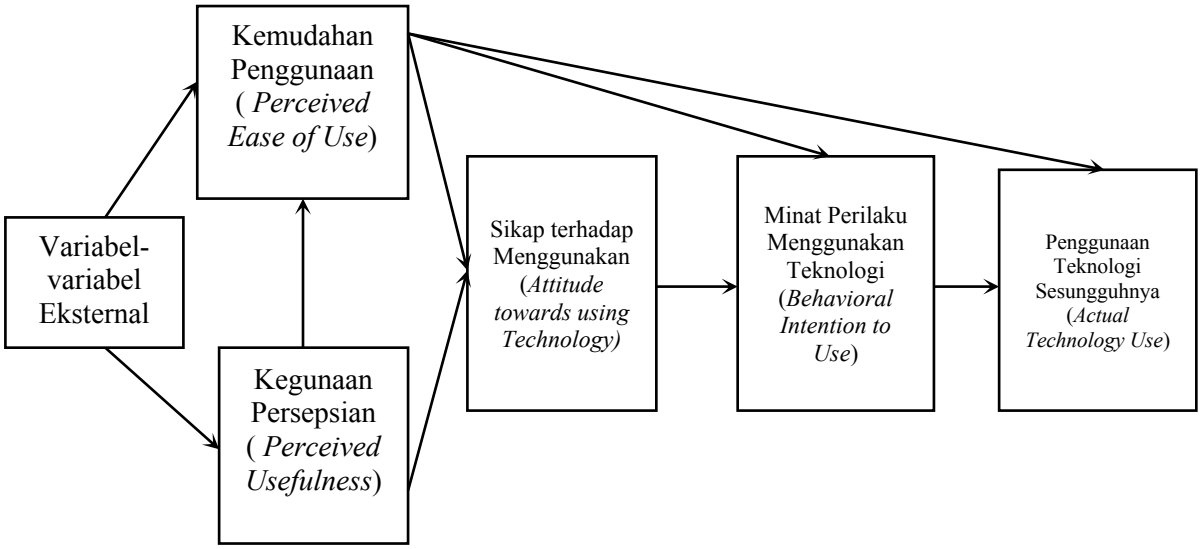


Figure 2.5 Development model Technology Acceptance Model (TAM)

Based on this description, the framework of thinking in this research can be depicted in Figure 2.7 below

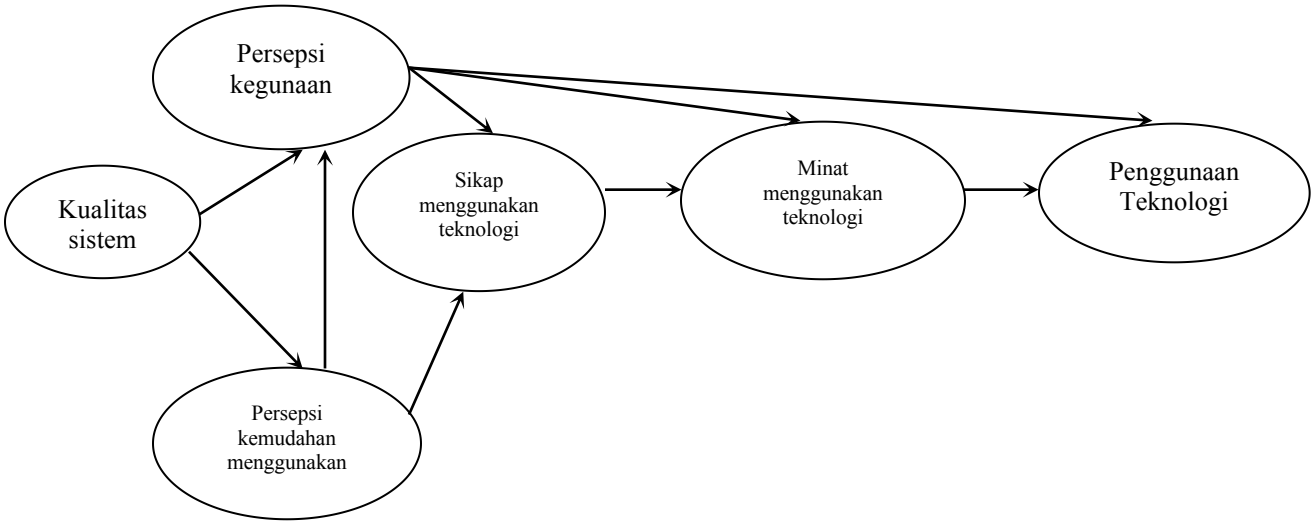


Figure 2.7 Framework of Thinking

2. Method

The type of research carried out is quantitative and verification research. This research uses statistical analysis. A quantitative approach is very appropriate for testing the statements stated in the research hypothesis. Apart from that, according to the variables studied, the second research approach is verification. According to Suharsimi Arikunto (2012), "verification research basically wants to test the truth of data collection in the field" (p. 7). The next stage of statistical testing is testing sample adequacy, normality, goodness of model and hypothesis to determine the relationship between the variables studied using a structural equation model or Structural Equation Modeling (SEM) with the help of AMOS version 2.0 statistical software.

3. Results and Discussion

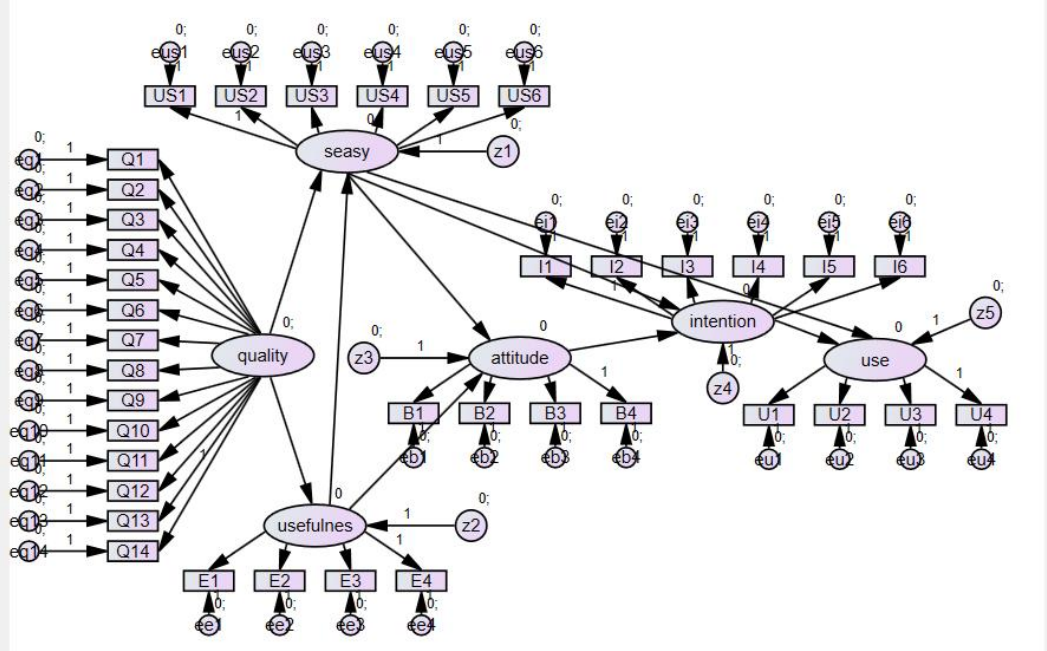


Figure 4.1 Analysis Model Results

(Source: Processed primary data, 2024)

Discussion of the statistical test results for measuring the technology acceptance model. Below we will explain the discussion of the test results for the influence of each independent variable on the dependent variable.

- The system quality variable is positively related to the convenience variable
  The test results show that the system quality variable has a positive influence on convenience with a critical ratio of 6.175 obtained from the path coefficient (standardized regression weight estimate) and the critical ratio significance level is above 1.96 for a significance of 5%, this shows that system quality is positively related with the convenience variable supported by measurement data from the technology acceptance model.
- The system quality variable is positively related to the usefulness variable

The critical ratio value of 7.033 is obtained from the path coefficient (standardized regression weight estimate) and the critical ratio significance level is above 1.96 for a significance of 5%, this shows that system quality is positively and significantly related to usefulness supported by data and technology model measurements acceptance model is accepted.

- The usefulness variable is positively related to the convenience variable.
  The significance level of the critical ratio is above 1.96 for a significance of 5%, with a critical ratio of 7.026 obtained from the path coefficient (standardized regression weight estimate) and, this shows that convenience is positively related to the usefulness variable supported by data, meaning that the technology acceptance model is measured. accepted.
- The usefulness variable is positively related to the behavioral variable
  The results of the path coefficient (standardized regression weight estimate) with a critical ratio of 6.053 and a critical ratio significance level above 1.96 for a significance of 5%, this shows that usefulness is positively and significantly related to behavior and is supported by data, meaning that the technology acceptance model is measured model accepted.
- The convenience variable is positively related to the behavior variable
  Based on testing, it can be seen that the convenience variable has a positive influence on behavioral variables with a critical ratio of 5.373 obtained from the path coefficient (standardized regression weight estimate and the critical ratio significance level is above 1.96 for 5% significance, meaning that the technology acceptance model measurement is accepted.
- Behavioral variables are positively related to intention variables
  Based on the test, it can be seen that the behavioral variable is positively related to the intention variable with a critical ratio of 5.882 obtained from the path coefficient (standardized regression weight estimate) and the significance level of the critical ratio is above 1.96 for a significance of 5%, meaning that behavior is positively related to the intention variable which is supported by data and measurement model technology acceptance model accepted.
- The convenience variable is positively related to the intention variable
  Based on the test, it can be seen that the usefulness variable is positively related to the intention variable with a critical ratio of 6.528 obtained from the path coefficient (standardized regression weight estimate) and the critical ratio significance level is above 1.96 for a significance of 5%, meaning that usefulness is positively related to the intention variable, supported by data and measurement model technology acceptance model accepted.
- The convenience variable is positively related to the usage variable
  Based on the test, it can be seen that the usefulness variable is positively related to the intention variable with a critical ratio of 4.831 obtained from the path coefficient (standardized regression weight estimate) and the critical ratio significance level is above 1.96 for a significance of 5%, meaning that behavior is positively related to the intention variable which is supported by data and measurement model technology acceptance model accepted.
- The intention variable is positively related to the use variable
  Based on the test, it can be seen that the intention variable is positively related to the use variable with a critical ratio of 6.017 obtained from the path coefficient (standardized

regression weight estimate) and the significance level of the critical ratio is above 1.96 for a significance of 5%, meaning that the intention variable is positively related to the use variable and is supported. by data and measurement models technology acceptance models are accepted.

4. Conclusion

The results of the Technology Acceptance Model (TAM) statistical test are that the system quality variable has a positive influence on convenience with a critical ratio of 6.175 obtained from the path coefficient (standardized regression weight estimate) and a critical ratio significance level above 1.96 for 5% significance. The critical ratio value of 7.033 is obtained from the path coefficient (standardized regression weight estimate) and the critical ratio significance level is above 1.96 for the system quality variable in terms of usefulness.
The critical ratio significance level is above 1.96 for 5% significance, with a critical ratio of 7.026 obtained from the path coefficient (standardized regression weight estimate), and this shows that convenience is positively related to the usefulness variable. The results of the path coefficient (standardized regression weight estimate) with a critical ratio of 6.053 and a critical ratio significance level above 1.96 for a significance of 5%, this shows that usefulness is positively and significantly related to behavior.
The convenience variable has a positive influence on behavioral variables with a critical ratio of 5.373 obtained from the path coefficient (standardized regression weight estimate) and the critical ratio significance level is above 1.96 for 5% significance. The behavioral variable is positively related to the intention variable with a critical ratio of 5.882 obtained from the path coefficient (standardized regression weight estimate) and the significance level of the critical ratio is above 1.96 for a significance of 5%, meaning that behavior is positively related to the intention variable.
The usefulness variable is positively related to the intention variable with a critical ratio of 4.831 obtained from the path coefficient (standardized regression weight estimate) and the significance level of the critical ratio is above 1.96 for a significance of 5%, meaning that usefulness is positively related to the intention variable supported by data and technology model measurements. acceptance model is accepted. The usefulness variable is positively related to the intention variable with a critical ratio of 4.831 obtained from the path coefficient (standardized regression weight estimate) and the significance level of the critical ratio is above 1.96 for a significance of 5%, meaning that behavior is positively related to the intention variable supported by data and technology model measurements. acceptance model is accepted. The intention variable is positively related to the use variable with a critical ratio of 6.017 obtained from the path coefficient (standardized regression weight estimate) and the significance level of the critical ratio is above 1.96 for a significance of 5%, meaning that the intention variable is positively related to the use variable supported by data and measurement models. technology acceptance model is accepted.

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